

REMARKS

Claims 1-13 are all the claims pending in the application. Claims 1-13 presently stand rejected. Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

Formal Matters

As an initial matter, the Examiner has indicated that he has not received the certified copy of the Priority Document. The Notice of Acceptance of Application mailed from the USPTO indicates that the Priority Documents were received on October 24, 2001. However, in view of the fact that the PTO previously assigned the same serial number to this application and another application, Applicant has ordered and will resubmit a copy of the priority document, and request that the Examiner acknowledge acceptance of the priority document.

The Disclosure is objected to because the Examiner has indicated that the specification does not follow the PTO's suggested guidelines for a preferred layout for the specification of a utility application. In response, Applicant has added section headings by this Amendment.

Claim Rejections Under 35 U.S.C. § 112

Claims 1-13 are rejected under 35 U.S.C. § 112, second paragraph. Applicant has addressed the §112 rejection in the manner discussed below. The amendments do not change the scope of subject matter claimed.

The Examiner has alleged that the use of the term “type” in claim 1 renders the claim indefinite. In response, Applicant has deleted the term “type” from claim 1.

Moreover, the Examiner has objected to the use of the term “appreciably” in claims 1 and 12 and the use of the term “approximately” in claim 9. In response, Applicant has used the term “substantially,” which is an acceptable term in U.S. patent practice.¹

The Examiner has objected to the use of the phrase “the enclosure (12) is a cylinder generated by rotation around a main axis (A1) of the container (24)” in claim 1. Because the enclosure is not rotating, but instead is merely cylindrical, claim 1 has been amended to recite that the cylinder *is provided so that its central axis is a main axis* of the container.

The Examiner has objected to the use of the recitation that the wave tunnel “opens into one wall thereof in the shape of a window.” In response, the claim has been amended to recite that the wave tunnel “is provided within a window of one wall of the enclosure.”

Claim Rejections Under 35 U.S.C. § 102 and §103

Claims 1, 8 and 10-13 are rejected under 35 U.S.C. § 102(a) as being anticipated by Darras et al. (WO 99-49991). Claims 1, 8 and 10-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Darras et al. (6,827,972) (“Darras ‘972”). Claims 2-7 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Darras ‘972. Claims 1-13 are rejected

¹ See MPEP §2173.05(b)D.

under 35 U.S.C. § 103(a) as being unpatentable over Leprince et al. (5,063,330). For the following reasons, these rejections are respectfully traversed.

Claim 1, 8, and 10-13

As an initial matter, with respect to independent claim 1, the claim has been amended to recite that the electrical field, resulting from the propagation of the microwaves, has an axial symmetry with respect to the central axis of the enclosure.

With respect to independent claim 1, Applicant traverses the rejection at least because neither Darras nor Leprince teaches all of the claim's recitations. For example, neither Darras nor Leprince teaches the claimed device for processing a container in which the inside diameter of the enclosure is such that microwaves are propagated in the enclosure primarily according to a mode in which the electrical field, resulting from the propagation of microwaves, *has an axial symmetry with respect to the central axis of the enclosure*.

Darras discloses a cavity 1 connected to an electromagnetic microwave generator by a waveguide 8.² Leprince discloses a housing 10 and a wave guide means 34.³ However, neither Darras nor Leprince teaches anything regarding the inside diameter of the cavity 1 or housing 10 being designed so that the electrical field, resulting from the propagation of microwaves, *has an axial symmetry with respect to the central axis of the enclosure*.

² See Darras at Fig. 1.

³ See Leprince at Fig. 1.

Instead, Darras does not discuss the inside diameter of the cavity 1.

Moreover, Leprince merely discloses that the diameter of the housing 10 is approximately 400 mm.⁴ However, a housing with a diameter of 400 mm would not provide an electrical field resulting from the propagation of microwaves, that *has an axial symmetry with respect to the central axis of the enclosure*.

Dependent claims 8 and 10-13 are patentable at least because of their dependency from claim 1.

Claims 2, 4, 6, and 9

Dependent claims 2, 4, 6, and 9 are patentable at least because of their dependency from claim 1.

Claims 3, 5, and 7

Finally, with respect to dependent claims 3, 5, and 7, Applicant respectfully requests that the Examiner withdraw the rejection at least because of their dependency from claim 1 and because neither Darras nor Leprince teaches or suggests the claimed device for processing a container in which the inside diameter of the enclosure is within the recited ranges.

In rejecting these claims, the Examiner acknowledges that neither Darras nor Leprince teaches or suggests the recited ranges. However, the Examiner has indicated that it would have

⁴ See Leprince at 7:18-19.

been an obvious design choice to “select/optimize the inside diameter of the enclosure as claimed depending on the object to be processed and the coupling mode required, and such limitation would not lend itself to the instant application absent the showing of unexpected results.”⁵

However, as discussed in the MPEP⁶, it is only a design choice to optimize variables that have been established as result effective. For example, *In Re Boesch and Slaney*² is only applicable to the optimization of a variable that has been recognized as achieving a result. In *In Re Boesch and Slaney*, the claims were directed to a material having specific amounts of nickel and other elements. The Board of Patent Appeals and Interferences found that “lowering the Nv value of a Co-Cr-Ni alloy and deletion of metals not consumed in precipitation from the Nv calculation are expressly suggested” (emphasis added) by prior art reference U.S. Patent No. 3,837,838.³ The U.S. Court of Customs and Patent Appeals relied on this evidence regarding modifying the specific amounts of material when it upheld the Board’s decision.

In contrast, in the present case, there is no such evidence of any suggestion regarding modifying the inside diameter of the Darras’ cavity 1 or Leprice’s housing 10 so that it is within one of the recited ranges.

⁵ See Office Action dated March 21, 2005 at page 7.

⁶ See MPEP §2144.05.II.B. (page 2100-143).

² *In Re Boesch and Slaney*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

³ *In Re Boesch*, , 617 F.2d at 276, 205 USPQ at 219.

In fact, the Applicant has found that by providing an enclosure with the proper inside diameter, the electrical field, resulting from the propagation of microwaves, has an axial symmetry with respect to the central axis of the enclosure.² This concept is not obvious at least because none of the recited references suggests modifying the inside diameter of the enclosure in this manner.

Conclusion

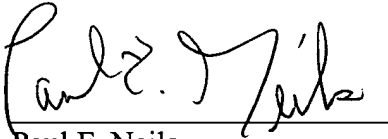
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

² See Specification at page 7, lines 3-21.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/501,718

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul F. Neils", written over a horizontal line.

Paul F. Neils
Registration No. 33,102

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: July 20, 2005

Attorney Docket No.: Q66643